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Lys Met Val Leu Tyr Ala Ser Pro Ile Val Glu Thr Arg Asp Asp Ser
320                    325                    330

gtt ata tgt tca cca tct aca aat tta gaa acc caa aag ctt ctt gtc   1359
Val Ile Cys Ser Pro Ser Thr Asn Leu Glu Thr Gln Lys Leu Leu Val
335                    340                    345                    350

agt aaa act ggc tta gaa acc gac ata gtt ttg cct ttg aaa aga aaa   1407
Ser Lys Thr Gly Leu Glu Thr Asp Ile Val Leu Pro Leu Lys Arg Lys
                    355                    360                    365

aga gac act gca gaa att gag ctg gat gca tgt gct aca gtt gca aat   1455
Arg Asp Thr Ala Glu Ile Glu Leu Asp Ala Cys Ala Thr Val Ala Asn
                    370                    375                    380

gga gat gat cac gtt atg agt tct gat ggg gtc att cca tct cca tct   1503
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| Gly | Asp | Asp | His | Val | Met | Ser | Ser | Asp | Gly | Val | Ile | Pro | Ser | Pro | Ser |
| | 385 | | | | | | 390 | | | | | 395 | | | |

ggg	tgc	aaa	aat	gat	aat	cga	cct	gaa	atg	tgc	aac	acg	tgt	aaa	aaa	1551
Gly	Cys	Lys	Asn	Asp	Asn	Arg	Pro	Glu	Met	Cys	Asn	Thr	Cys	Lys	Lys
	400					405					410				

cgg	caa	aag	gtc	aac	ggt	gat	tgt	caa	aat	agg	agt	gtt	tgc	tcc	tgc	1599
Arg	Gln	Lys	Val	Asn	Gly	Asp	Cys	Gln	Asn	Arg	Ser	Val	Cys	Ser	Cys
415					420					425					430

att	gtc	cag	cca	gtt	gaa	gaa	tct	gat	aac	gtg	aca	cag	gat	atg	aaa	1647
Ile	Val	Gln	Pro	Val	Glu	Glu	Ser	Asp	Asn	Val	Thr	Gln	Asp	Met	Lys
				435					440					445	

gaa	act	gga	cca	gtt	acg	agc	aga	gaa	tat	gag	gag	aac	ggg	caa	ata	1695
Glu	Thr	Gly	Pro	Val	Thr	Ser	Arg	Glu	Tyr	Glu	Glu	Asn	Gly	Gln	Ile
			450					455				460			

caa	cat	ggt	aaa	tca	agt	gat	ccc	aaa	ttc	tat	tct	tcg	gtg	tac	cca	1743
Gln	His	Gly	Lys	Ser	Ser	Asp	Pro	Lys	Phe	Tyr	Ser	Ser	Val	Tyr	Pro
		465					470					475			

gag	tat	tgg	gtt	cct	gtg	cag	cta	tca	gat	gta	cag	ctg	gag	caa	tac	1791
Glu	Tyr	Trp	Val	Pro	Val	Gln	Leu	Ser	Asp	Val	Gln	Leu	Glu	Gln	Tyr
	480					485					490				

tgt	cag	act	ctc	ttc	tcc	aaa	tcc	tta	tct	ctt	tct	tca	ctt	tcg	aag	1839
Cys	Gln	Thr	Leu	Phe	Ser	Lys	Ser	Leu	Ser	Leu	Ser	Ser	Leu	Ser	Lys
495					500					505					510

att	gat	ctt	gga	gct	cta	gaa	gaa	act	ctc	aat	tct	gta	aga	aaa	acc	1887
Ile	Asp	Leu	Gly	Ala	Leu	Glu	Glu	Thr	Leu	Asn	Ser	Val	Arg	Lys	Thr
			515					520					525		

tgt	gac	cat	cca	tac	gtt	atg	gat	gca	tct	ttg	aaa	caa	ctg	ctc	acc	1935
Cys	Asp	His	Pro	Tyr	Val	Met	Asp	Ala	Ser	Leu	Lys	Gln	Leu	Leu	Thr
		530					535					540			

aag	aat	ctg	gag	ttg	cat	gaa	atc	ctg	gat	gta	gaa	att	aaa	gcg	agc	1983
Lys	Asn	Leu	Glu	Leu	His	Glu	Ile	Leu	Asp	Val	Glu	Ile	Lys	Ala	Ser
		545					550					555			

ggg	aaa	ctt	cac	ctc	ctt	gat	aaa	atg	ctt	act	cat	ata	aaa	aag	aat	2031
Gly	Lys	Leu	His	Leu	Leu	Asp	Lys	Met	Leu	Thr	His	Ile	Lys	Lys	Asn
	560					565					570				

ggt	tta	aaa	gca	gtt	gtc	ttc	tac	cag	gca	aca	caa	acc	cct	gaa	ggg	2079
Gly	Leu	Lys	Ala	Val	Val	Phe	Tyr	Gln	Ala	Thr	Gln	Thr	Pro	Glu	Gly
575				580					585					590	

ctt	ctg	ctt	ggt	aat	att	ctc	gaa	gat	ttt	gtg	ggt	caa	aga	ttt	ggt	2127
Leu	Leu	Leu	Gly	Asn	Ile	Leu	Glu	Asp	Phe	Val	Gly	Gln	Arg	Phe	Gly
				595					600					605	

cca	aaa	tct	tat	gag	cat	ggg	ata	tat	tcc	tca	aag	aag	aac	tcc	gct	2175
Pro	Lys	Ser	Tyr	Glu	His	Gly	Ile	Tyr	Ser	Ser	Lys	Lys	Asn	Ser	Ala
			610					615					620		

ata	aac	aat	ttc	aac	aag	gag	agt	caa	tgc	tgt	gtt	ctg	ctg	ttg	gaa	2223
Ile	Asn	Asn	Phe	Asn	Lys	Glu	Ser	Gln	Cys	Cys	Val	Leu	Leu	Leu	Glu
		625					630					635			

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aca cgt gcc tgc agt caa acc att aaa ctc ttg cga gct gat gcg ttt    2271
Thr Arg Ala Cys Ser Gln Thr Ile Lys Leu Leu Arg Ala Asp Ala Phe
    640             645             650

att ctt ttt gga agc agc ttg aat cca tcg cat gat gtt aag cac gta    2319
Ile Leu Phe Gly Ser Ser Leu Asn Pro Ser His Asp Val Lys His Val
655             660             665             670

gag aag ata aaa atc gag tca tgt tct gaa aga act aag ata ttc cga    2367
Glu Lys Ile Lys Ile Glu Ser Cys Ser Glu Arg Thr Lys Ile Phe Arg
                675             680             685

ttg tac tca gta tgt aca gtt gaa gaa aaa gcc ctg att ctg gct agg    2415
Leu Tyr Ser Val Cys Thr Val Glu Glu Lys Ala Leu Ile Leu Ala Arg
            690             695             700

caa aat atg cgg caa aat aaa gct gta gag aac cta aac cgc tct ctc    2463
Gln Asn Met Arg Gln Asn Lys Ala Val Glu Asn Leu Asn Arg Ser Leu
        705             710             715

acg cac gca ctg ctc atg tgg ggg gcg tca tac tta ttt gat aaa ctg    2511
Thr His Ala Leu Leu Met Trp Gly Ala Ser Tyr Leu Phe Asp Lys Leu
    720             725             730

gat cat ttt cac agc agt gaa act cca gat tca gga gtt tca ttt gaa    2559
Asp His Phe His Ser Ser Glu Thr Pro Asp Ser Gly Val Ser Phe Glu
735             740             745             750

caa tct att atg gac ggc gtg att cat gaa ttc tcg tcc ata ctt tct    2607
Gln Ser Ile Met Asp Gly Val Ile His Glu Phe Ser Ser Ile Leu Ser
                755             760             765

tcc aaa ggt gga gaa gaa aat gaa gtc aag ctg tgt cta ctt ttg gag    2655
Ser Lys Gly Gly Glu Glu Asn Glu Val Lys Leu Cys Leu Leu Leu Glu
            770             775             780

gcc aag cat gct cag gga act tac agc agt gat tct act cta ttt ggt    2703
Ala Lys His Ala Gln Gly Thr Tyr Ser Ser Asp Ser Thr Leu Phe Gly
        785             790             795

gaa gac cat att aag ttg tca gat gaa gag agt cca aat ata ttt tgg    2751
Glu Asp His Ile Lys Leu Ser Asp Glu Glu Ser Pro Asn Ile Phe Trp
    800             805             810

tca aag ctg ttg ggg gga aaa aat cct atg tgg aaa tac cct tca gat    2799
Ser Lys Leu Leu Gly Gly Lys Asn Pro Met Trp Lys Tyr Pro Ser Asp
815             820             825             830

act ccc caa agg aat cga aaa cga gtt cag tat ttt gag ggt tct gaa    2847
Thr Pro Gln Arg Asn Arg Lys Arg Val Gln Tyr Phe Glu Gly Ser Glu
                835             840             845

gcg agt ccc aaa act ggc gat ggt gga aat gca aag aag cga aag aag    2895
Ala Ser Pro Lys Thr Gly Asp Gly Gly Asn Ala Lys Lys Arg Lys Lys
            850             855             860

gct tct gat gat gtc act gat ccc cgg gtc act gat ccg cca gta gat    2943
Ala Ser Asp Asp Val Thr Asp Pro Arg Val Thr Asp Pro Pro Val Asp
        865             870             875

gat gat gaa aga aag gcc tct ggg aag gat cac atg ggg gct ttg gag    2991
Asp Asp Glu Arg Lys Ala Ser Gly Lys Asp His Met Gly Ala Leu Glu
    880             885             890
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tca cca aaa gtc ata aca ctc cag tca tca tgt aaa tct tct ggt aca    3039
Ser Pro Lys Val Ile Thr Leu Gln Ser Ser Cys Lys Ser Ser Gly Thr
895             900             905             910

gat ggt aca ttg gat gga aat gat gct ttt ggc ttg tat tct atg ggc    3087
Asp Gly Thr Leu Asp Gly Asn Asp Ala Phe Gly Leu Tyr Ser Met Gly
                915             920             925

agc cat atc tct gga atc cca gag gat atg tta gct agt caa gat tgg    3135
Ser His Ile Ser Gly Ile Pro Glu Asp Met Leu Ala Ser Gln Asp Trp
            930             935             940

ggg aaa ata ccg gat gaa tca cag agg agg ctc cac act gtt tta aag    3183
Gly Lys Ile Pro Asp Glu Ser Gln Arg Arg Leu His Thr Val Leu Lys
        945             950             955

ccg aag atg gca aaa ctt tgc caa gtt ttg cat ctt tca gat gct tgc    3231
Pro Lys Met Ala Lys Leu Cys Gln Val Leu His Leu Ser Asp Ala Cys
    960             965             970

aca agc atg gtc gga aat ttt ctc gaa tat gtt att gaa aat cac cga    3279
Thr Ser Met Val Gly Asn Phe Leu Glu Tyr Val Ile Glu Asn His Arg
975             980             985             990

atc tac gaa gag cca gcc act act ttt cag gca ttc cag ata gcc ctg    3327
Ile Tyr Glu Glu Pro Ala Thr Thr Phe Gln Ala Phe Gln Ile Ala Leu
                995             1000            1005

agt tgg att gca gcc ttg ttg gta aag caa att ctt agc cac aaa gaa    3375
Ser Trp Ile Ala Ala Leu Leu Val Lys Gln Ile Leu Ser His Lys Glu
            1010            1015            1020

tct ctg gtc cgt gca aat tct gaa tta gct ttc aaa tgc tct aga gta    3423
Ser Leu Val Arg Ala Asn Ser Glu Leu Ala Phe Lys Cys Ser Arg Val
        1025            1030            1035

gag gtg gat tat att tat tcg ata ttg tcc tgc atg aag agt ctg ttc    3471
Glu Val Asp Tyr Ile Tyr Ser Ile Leu Ser Cys Met Lys Ser Leu Phe
    1040            1045            1050

ctg gag cat aca caa ggt ttg cag ttc gat tgc ttt ggt act aat tct    3519
Leu Glu His Thr Gln Gly Leu Gln Phe Asp Cys Phe Gly Thr Asn Ser
1055            1060            1065            1070

aaa cag tca gtg gtt agc aca aaa cta gta aat gaa agt ctc tca ggg    3567
Lys Gln Ser Val Val Ser Thr Lys Leu Val Asn Glu Ser Leu Ser Gly
            1075            1080            1085

gct aca gtg cgt gac gaa aag att aat acg aag tcg atg cga aat agc    3615
Ala Thr Val Arg Asp Glu Lys Ile Asn Thr Lys Ser Met Arg Asn Ser
        1090            1095            1100

tca gag gat gaa gag tgc atg act gag aag aga tgt agc cat tat agc    3663
Ser Glu Asp Glu Glu Cys Met Thr Glu Lys Arg Cys Ser His Tyr Ser
        1105            1110            1115

aca gca aca aga gat atc gaa aag act att agt ggc ata aaa aag aaa    3711
Thr Ala Thr Arg Asp Ile Glu Lys Thr Ile Ser Gly Ile Lys Lys Lys
    1120            1125            1130

tac aag aag caa gtg caa aag ctt gta caa gag cat gag gaa aag aaa    3759
Tyr Lys Lys Gln Val Gln Lys Leu Val Gln Glu His Glu Glu Lys Lys
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        1135                1140                    1145                    1150
atg gag ctg tta aat atg tat gca gac aag aag cag aaa ctt gaa act    3807
Met Glu Leu Leu Asn Met Tyr Ala Asp Lys Lys Gln Lys Leu Glu Thr
                1155                    1160                    1165

agt aaa agt gtg gaa gca gca gta att cgt att acc tgt tca cgg acc    3855
Ser Lys Ser Val Glu Ala Ala Val Ile Arg Ile Thr Cys Ser Arg Thr
                1170                    1175                    1180

agt act caa gtg ggt gat ctc aaa ctg ctg gat cat aat tat gaa aga    3903
Ser Thr Gln Val Gly Asp Leu Lys Leu Leu Asp His Asn Tyr Glu Arg
            1185                    1190                    1195

aag ttt gat gaa atc aaa agt gag aaa aat gaa tgc ctc aaa agt ctg    3951
Lys Phe Asp Glu Ile Lys Ser Glu Lys Asn Glu Cys Leu Lys Ser Leu
        1200                    1205                    1210

gag caa atg cac gag gtt gca aag aag aag ttg gct gag gat gaa gcc    3999
Glu Gln Met His Glu Val Ala Lys Lys Lys Leu Ala Glu Asp Glu Ala
    1215                    1220                    1225                    1230

tgt tgg att aat cgg ata aag agc tgg gca gct aaa tta aaa gtt tgt    4047
Cys Trp Ile Asn Arg Ile Lys Ser Trp Ala Ala Lys Leu Lys Val Cys
                1235                    1240                    1245

gtt ccc att caa agt ggc aat aac aag cat ttt agt ggt tca tca aac    4095
Val Pro Ile Gln Ser Gly Asn Asn Lys His Phe Ser Gly Ser Ser Asn
                1250                    1255                    1260

att tcc caa aat gct cct gat gta caa att tgc aat aat gct aac gtt    4143
Ile Ser Gln Asn Ala Pro Asp Val Gln Ile Cys Asn Asn Ala Asn Val
            1265                    1270                    1275

gaa gct act tac gct gat acg aat tgc atg gct tcc aag gtt aat caa    4191
Glu Ala Thr Tyr Ala Asp Thr Asn Cys Met Ala Ser Lys Val Asn Gln
        1280                    1285                    1290

gtg cca gaa gca gaa aac aca tta gga acc atg tcg ggt ggc agc act    4239
Val Pro Glu Ala Glu Asn Thr Leu Gly Thr Met Ser Gly Gly Ser Thr
    1295                    1300                    1305                    1310

caa caa gtt cat gaa atg gtg gat gta aga aat gac gag aca atg gat    4287
Gln Gln Val His Glu Met Val Asp Val Arg Asn Asp Glu Thr Met Asp
                1315                    1320                    1325

gtc tca gct ttg tct cgt gaa cag ctt aca aag agc cag tcc aat gag    4335
Val Ser Ala Leu Ser Arg Glu Gln Leu Thr Lys Ser Gln Ser Asn Glu
                1330                    1335                    1340

cac gct tct atc act gtg cct gag att ttg att cct gct gac tgt caa    4383
His Ala Ser Ile Thr Val Pro Glu Ile Leu Ile Pro Ala Asp Cys Gln
            1345                    1350                    1355

gag gaa ttt gcg gcc ttg aac gtg cat ttg tca gaa gac cag aat tgt    4431
Glu Glu Phe Ala Ala Leu Asn Val His Leu Ser Glu Asp Gln Asn Cys
        1360                    1365                    1370

gac aga ata aca tct gcg gca tca gat gaa gat gtt tca tca agg gtg    4479
Asp Arg Ile Thr Ser Ala Ala Ser Asp Glu Asp Val Ser Ser Arg Val
1375                    1380                    1385                    1390

cca gag gta tcc cag tca ctc gaa aat ctt tct gcc tcc ccc gag ttt    4527
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Pro Glu Val Ser Gln Ser Leu Glu Asn Leu Ser Ala Ser Pro Glu Phe
            1395   1400   1405

tct cta aat aga gag gag gct ttg gtt aca aca gaa aat aga aga aca   4575
Ser Leu Asn Arg Glu Glu Ala Leu Val Thr Thr Glu Asn Arg Arg Thr
            1410   1415   1420

agt cat gtg ggt ttt gat act gat aac att ttg gac cag cag aat aga   4623
Ser His Val Gly Phe Asp Thr Asp Asn Ile Leu Asp Gln Gln Asn Arg
     1425   1430   1435

gaa gat tgt tct ctt gac caa gag att cct gac gag tta gcg atg cct   4671
Glu Asp Cys Ser Leu Asp Gln Glu Ile Pro Asp Glu Leu Ala Met Pro
  1440   1445   1450

gtg caa cat ctt gcg tct gtg gta gag act agg ggt gct gct gaa tct   4719
Val Gln His Leu Ala Ser Val Val Glu Thr Arg Gly Ala Ala Glu Ser
1455   1460   1465   1470

gat cag tat ggt caa gat ata tgt cct atg cct tct tca ctg gct gga   4767
Asp Gln Tyr Gly Gln Asp Ile Cys Pro Met Pro Ser Ser Leu Ala Gly
            1475   1480   1485

aag caa cct gac cca gca gca aac act gag agc gaa aat ctt gaa gaa   4815
Lys Gln Pro Asp Pro Ala Ala Asn Thr Glu Ser Glu Asn Leu Glu Glu
            1490   1495   1500

gca att gag cct cag tct gct ggt tca gaa aca gta gag act act gat   4863
Ala Ile Glu Pro Gln Ser Ala Gly Ser Glu Thr Val Glu Thr Thr Asp
            1505   1510   1515

ttt gct gca tca cat cag ggt gat caa gtt aca tgt cct ttg cta tct   4911
Phe Ala Ala Ser His Gln Gly Asp Gln Val Thr Cys Pro Leu Leu Ser
     1520   1525   1530

tca ccg act gga aat cag cct gcg cca gaa gca aat att gaa ggc caa   4959
Ser Pro Thr Gly Asn Gln Pro Ala Pro Glu Ala Asn Ile Glu Gly Gln
1535   1540   1545   1550

aat atc aac aca tca gct gag ccc cat gta gcg ggt cca gat gca gta   5007
Asn Ile Asn Thr Ser Ala Glu Pro His Val Ala Gly Pro Asp Ala Val
            1555   1560   1565

gag agt ggt gat tat gca gta ata gat cag gaa aca atg ggt gct cag   5055
Glu Ser Gly Asp Tyr Ala Val Ile Asp Gln Glu Thr Met Gly Ala Gln
            1570   1575   1580

gat gca tgc tct ctg cca tct gga tcg gtt gga act cag tct gac cta   5103
Asp Ala Cys Ser Leu Pro Ser Gly Ser Val Gly Thr Gln Ser Asp Leu
            1585   1590   1595

gga gca aac att gag ggt caa aat gtc aca aca gtg gct caa ctt ccc   5151
Gly Ala Asn Ile Glu Gly Gln Asn Val Thr Thr Val Ala Gln Leu Pro
     1600   1605   1610

aca gat gga tca gat gca gtt gta acc ggt gga tct cct gta tca gat   5199
Thr Asp Gly Ser Asp Ala Val Val Thr Gly Gly Ser Pro Val Ser Asp
1615   1620   1625   1630

cag tgt gcc cag gat gca tct cct atg cca tta tct tcg cct gga aat   5247
Gln Cys Ala Gln Asp Ala Ser Pro Met Pro Leu Ser Ser Pro Gly Asn
            1635   1640   1645

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cac cct gat aca gca gtt aat atc gag ggt tta gat aac aca tca gta   5295
His Pro Asp Thr Ala Val Asn Ile Glu Gly Leu Asp Asn Thr Ser Val
        1650             1655             1660

gct gag cct cat ata agt gga tca gat gca tgt gaa atg gaa att tca   5343
Ala Glu Pro His Ile Ser Gly Ser Asp Ala Cys Glu Met Glu Ile Ser
        1665             1670             1675

gaa cct ggt ccc caa gta gag cgg tca acc ttt gca aat ctt ttc cat   5391
Glu Pro Gly Pro Gln Val Glu Arg Ser Thr Phe Ala Asn Leu Phe His
    1680             1685             1690

gaa ggt ggc gtg gag cat tca gca ggt gta aca gct ctt gtt cca tca   5439
Glu Gly Gly Val Glu His Ser Ala Gly Val Thr Ala Leu Val Pro Ser
1695             1700             1705             1710

ctt ctt aac aat ggt acg gaa cag att gcc gtt caa cct gtt cct caa   5487
Leu Leu Asn Asn Gly Thr Glu Gln Ile Ala Val Gln Pro Val Pro Gln
            1715             1720             1725

ata cct ttc cct gtg ttc aac gac ccg ttt ctg cat gaa ctg gag aag   5535
Ile Pro Phe Pro Val Phe Asn Asp Pro Phe Leu His Glu Leu Glu Lys
        1730             1735             1740

ttg cgg aga gaa tca gag aac tca aag aag act ttt gaa gaa aaa aaa   5583
Leu Arg Arg Glu Ser Glu Asn Ser Lys Lys Thr Phe Glu Glu Lys Lys
        1745             1750             1755

tca atc ttg aaa gct gaa ctc gag agg aag atg gct gaa gta caa gca   5631
Ser Ile Leu Lys Ala Glu Leu Glu Arg Lys Met Ala Glu Val Gln Ala
    1760             1765             1770

gag ttt cga aga aaa ttt cat gag gta gaa gcc gag cat aac acc aga   5679
Glu Phe Arg Arg Lys Phe His Glu Val Glu Ala Glu His Asn Thr Arg
1775             1780             1785             1790

acg aca aag ata gag aag gat aag aat ctt gtt ata atg aac aaa ctg   5727
Thr Thr Lys Ile Glu Lys Asp Lys Asn Leu Val Ile Met Asn Lys Leu
        1795             1800             1805

ttg gcg aat gcg ttc ttg tcc aaa tgt act gac aag aag gta tct ccc   5775
Leu Ala Asn Ala Phe Leu Ser Lys Cys Thr Asp Lys Lys Val Ser Pro
        1810             1815             1820

tca gga gct cca agg ggt aaa att cag cag cta gca cag aga gca gca   5823
Ser Gly Ala Pro Arg Gly Lys Ile Gln Gln Leu Ala Gln Arg Ala Ala
        1825             1830             1835

caa gtg agt gca ctg aga aat tac att gct cct cag cag ctt cag gca   5871
Gln Val Ser Ala Leu Arg Asn Tyr Ile Ala Pro Gln Gln Leu Gln Ala
    1840             1845             1850

tct tct ttt cct gct cct gct ctg gtt tcg gct cct ctg caa ctt cag   5919
Ser Ser Phe Pro Ala Pro Ala Leu Val Ser Ala Pro Leu Gln Leu Gln
1855             1860             1865             1870

caa tca tca ttt cct gct cct ggt ccg gct cct ctg cag cct cag gca   5967
Gln Ser Ser Phe Pro Ala Pro Gly Pro Ala Pro Leu Gln Pro Gln Ala
        1875             1880             1885

tct tcg ttt cct tct tca gtc tct cgt cca tca gcc ctt ctt ctg aat   6015
Ser Ser Phe Pro Ser Ser Val Ser Arg Pro Ser Ala Leu Leu Leu Asn
        1890             1895             1900
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ttt gcg gtc tgt cca atg cct cag ccc aga cag cct ctc ata tcc aac    6063
Phe Ala Val Cys Pro Met Pro Gln Pro Arg Gln Pro Leu Ile Ser Asn
        1905                1910                1915

ata gct cca act cca tca gtt act cct gca aca aat cca ggt ctg cgt    6111
Ile Ala Pro Thr Pro Ser Val Thr Pro Ala Thr Asn Pro Gly Leu Arg
    1920                1925                1930

tct cct gca cca cac cta aac tca tat aga cca tcc tct tca act ccc    6159
Ser Pro Ala Pro His Leu Asn Ser Tyr Arg Pro Ser Ser Ser Thr Pro
1935                1940                1945                1950

gtc gcc aca gct act cca acc tcg tca gtg cct cct caa gct ttg aca    6207
Val Ala Thr Ala Thr Pro Thr Ser Ser Val Pro Pro Gln Ala Leu Thr
        1955                1960                1965

tat tca gct gtg tca att cag cag cag caa gaa caa caa ccg caa cag    6255
Tyr Ser Ala Val Ser Ile Gln Gln Gln Gln Glu Gln Gln Pro Gln Gln
        1970                1975                1980

agc ttg agc agt gga ttg cag agc aac aat gaa gtg gtt tgt ctt tct    6303
Ser Leu Ser Ser Gly Leu Gln Ser Asn Asn Glu Val Val Cys Leu Ser
        1985                1990                1995

gac gac gag tgacctaaga ggagagatgg ttagggtctt agttattgat           6352
Asp Asp Glu
        2000

ttttagagag ttaataatag tatatatata tatgtataag taggttacct aatctctgtc 6412

gttaatctaa tttagtgagt caggaaccga ctcgttggct aaggtctctc cttttgaaac 6472

gcaacgttct actttcatgt atataaatac agtctgatca cacaacacaa attgatgatt 6532

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Gly Leu Arg Arg Ser Ser Arg Gly Thr Pro Ser Thr Lys Val Ile Thr
        35                  40                  45

Pro Ala Ser Ala Thr Arg Lys Ser Glu Arg Leu Ala Pro Ser Pro Ala
    50                  55                  60

Ser Val Ser Lys Lys Ser Gly Gly Ile Val Lys Asn Ser Thr Pro Ser
65                  70                  75                  80

Ser Leu Arg Arg Ser Asn Arg Gly Lys Thr Glu Val Ser Leu Gln Ser
                85                  90                  95

Ser Lys Gly Ser Asp Asn Ser Ile Arg Lys Gly Asp Thr Ser Pro Asp
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                    100                    105                    110
Ile Glu Gln Arg Lys Asp Ser Val Glu Glu Ser Thr Asp Lys Ile Lys
        115                    120                    125

Pro Ile Met Ser Ala Arg Ser Tyr Arg Ala Leu Phe Arg Gly Lys Leu
        130                    135                    140

Lys Glu Ser Glu Ala Leu Val Asp Ala Ser Pro Asn Glu Glu Glu Leu
145                    150                    155                    160

Val Val Val Gly Cys Ser Arg Arg Ile Pro Ala Gly Asn Asp Asp Val
                165                    170                    175

Gln Gly Lys Thr Asp Cys Pro Pro Pro Ala Asp Ala Gly Ser Lys Arg
            180                    185                    190

Leu Pro Val Asp Glu Thr Ser Leu Asp Lys Gly Thr Asp Phe Pro Leu
            195                    200                    205

Lys Ser Val Thr Glu Thr Glu Lys Ile Val Leu Asp Ala Ser Pro Ile
        210                    215                    220

Val Glu Thr Gly Asp Asp Ser Val Ile Gly Ser Pro Ser Glu Asn Leu
225                    230                    235                    240

Glu Thr Gln Lys Leu Gln Asp Gly Lys Thr Asp Cys Ser Pro Pro Ala
            245                    250                    255

Asn Ala Glu Ser Lys Thr Leu Pro Val Gly Glu Thr Ser Leu Glu Lys
            260                    265                    270

Glu Tyr Pro Gln Lys Phe Gln Asp Asp Asn Thr Asp Cys Leu Pro Pro
        275                    280                    285

Ala Asn Ala Glu Ser Lys Arg Leu Pro Val Gly Glu Thr Ser Leu Glu
        290                    295                    300

Lys Asp Thr Asp Phe Pro Leu Lys Ser Thr Thr Glu Thr Gly Lys Met
305                    310                    315                    320

Val Leu Tyr Ala Ser Pro Ile Val Glu Thr Arg Asp Asp Ser Val Ile
            325                    330                    335

Cys Ser Pro Ser Thr Asn Leu Glu Thr Gln Lys Leu Leu Val Ser Lys
            340                    345                    350

Thr Gly Leu Glu Thr Asp Ile Val Leu Pro Leu Lys Arg Lys Arg Asp
        355                    360                    365

Thr Ala Glu Ile Glu Leu Asp Ala Cys Ala Thr Val Ala Asn Gly Asp
    370                    375                    380

Asp His Val Met Ser Ser Asp Gly Val Ile Pro Ser Pro Ser Gly Cys
385                    390                    395                    400

Lys Asn Asp Asn Arg Pro Glu Met Cys Asn Thr Cys Lys Lys Arg Gln
            405                    410                    415

Lys Val Asn Gly Asp Cys Gln Asn Arg Ser Val Cys Ser Cys Ile Val
            420                    425                    430

Gln Pro Val Glu Glu Ser Asp Asn Val Thr Gln Asp Met Lys Glu Thr
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                        435   440   445

Gly Pro Val Thr Ser Arg Glu Tyr Glu Glu Asn Gly Gln Ile Gln His
    450   455   460

Gly Lys Ser Ser Asp Pro Lys Phe Tyr Ser Ser Val Tyr Pro Glu Tyr
465   470   475   480

Trp Val Pro Val Gln Leu Ser Asp Val Gln Leu Glu Gln Tyr Cys Gln
                485   490   495

Thr Leu Phe Ser Lys Ser Leu Ser Leu Ser Ser Leu Ser Lys Ile Asp
            500   505   510

Leu Gly Ala Leu Glu Glu Thr Leu Asn Ser Val Arg Lys Thr Cys Asp
    515   520   525

His Pro Tyr Val Met Asp Ala Ser Leu Lys Gln Leu Leu Thr Lys Asn
    530   535   540

Leu Glu Leu His Glu Ile Leu Asp Val Glu Ile Lys Ala Ser Gly Lys
545   550   555   560

Leu His Leu Leu Asp Lys Met Leu Thr His Ile Lys Lys Asn Gly Leu
            565   570   575

Lys Ala Val Val Phe Tyr Gln Ala Thr Gln Thr Pro Glu Gly Leu Leu
            580   585   590

Leu Gly Asn Ile Leu Glu Asp Phe Val Gly Gln Arg Phe Gly Pro Lys
    595   600   605

Ser Tyr Glu His Gly Ile Tyr Ser Ser Lys Lys Asn Ser Ala Ile Asn
    610   615   620

Asn Phe Asn Lys Glu Ser Gln Cys Cys Val Leu Leu Leu Glu Thr Arg
625   630   635   640

Ala Cys Ser Gln Thr Ile Lys Leu Leu Arg Ala Asp Ala Phe Ile Leu
            645   650   655

Phe Gly Ser Ser Leu Asn Pro Ser His Asp Val Lys His Val Glu Lys
            660   665   670

Ile Lys Ile Glu Ser Cys Ser Glu Arg Thr Lys Ile Phe Arg Leu Tyr
    675   680   685

Ser Val Cys Thr Val Glu Glu Lys Ala Leu Ile Leu Ala Arg Gln Asn
    690   695   700

Met Arg Gln Asn Lys Ala Val Glu Asn Leu Asn Arg Ser Leu Thr His
705   710   715   720

Ala Leu Leu Met Trp Gly Ala Ser Tyr Leu Phe Asp Lys Leu Asp His
            725   730   735

Phe His Ser Ser Glu Thr Pro Asp Ser Gly Val Ser Phe Glu Gln Ser
            740   745   750

Ile Met Asp Gly Val Ile His Glu Phe Ser Ser Ile Leu Ser Ser Lys
    755   760   765

Gly Gly Glu Glu Asn Glu Val Lys Leu Cys Leu Leu Leu Glu Ala Lys

                770   775   780

His Ala Gln Gly Thr Tyr Ser Ser Asp Ser Thr Leu Phe Gly Glu Asp
785   790   795   800

His Ile Lys Leu Ser Asp Glu Glu Ser Pro Asn Ile Phe Trp Ser Lys
                805   810   815

Leu Leu Gly Gly Lys Asn Pro Met Trp Lys Tyr Pro Ser Asp Thr Pro
                820   825   830

Gln Arg Asn Arg Lys Arg Val Gln Tyr Phe Glu Gly Ser Glu Ala Ser
            835   840   845

Pro Lys Thr Gly Asp Gly Gly Asn Ala Lys Lys Arg Lys Lys Ala Ser
        850   855   860

Asp Asp Val Thr Asp Pro Arg Val Thr Asp Pro Pro Val Asp Asp Asp
865   870   875   880

Glu Arg Lys Ala Ser Gly Lys Asp His Met Gly Ala Leu Glu Ser Pro
                885   890   895

Lys Val Ile Thr Leu Gln Ser Ser Cys Lys Ser Ser Gly Thr Asp Gly
                900   905   910

Thr Leu Asp Gly Asn Asp Ala Phe Gly Leu Tyr Ser Met Gly Ser His
        915   920   925

Ile Ser Gly Ile Pro Glu Asp Met Leu Ala Ser Gln Asp Trp Gly Lys
    930   935   940

Ile Pro Asp Glu Ser Gln Arg Arg Leu His Thr Val Leu Lys Pro Lys
945   950   955   960

Met Ala Lys Leu Cys Gln Val Leu His Leu Ser Asp Ala Cys Thr Ser
                965   970   975

Met Val Gly Asn Phe Leu Glu Tyr Val Ile Glu Asn His Arg Ile Tyr
                980   985   990

Glu Glu Pro Ala Thr Thr Phe Gln Ala Phe Gln Ile Ala Leu Ser Trp
            995   1000   1005

Ile Ala Ala Leu Leu Val Lys Gln Ile Leu Ser His Lys Glu Ser
    1010   1015   1020

Leu Val Arg Ala Asn Ser Glu Leu Ala Phe Lys Cys Ser Arg Val
    1025   1030   1035

Glu Val Asp Tyr Ile Tyr Ser Ile Leu Ser Cys Met Lys Ser Leu
    1040   1045   1050

Phe Leu Glu His Thr Gln Gly Leu Gln Phe Asp Cys Phe Gly Thr
    1055   1060   1065

Asn Ser Lys Gln Ser Val Val Ser Thr Lys Leu Val Asn Glu Ser
    1070   1075   1080

Leu Ser Gly Ala Thr Val Arg Asp Glu Lys Ile Asn Thr Lys Ser
    1085   1090   1095

Met Arg Asn Ser Ser Glu Asp Glu Glu Cys Met Thr Glu Lys Arg

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        1100                    1105                         1110

Cys Ser His Tyr Ser Thr Ala  Thr Arg Asp Ile Glu  Lys Thr Ile
    1115                1120                 1125

Ser Gly Ile Lys Lys Lys Tyr  Lys Lys Gln Val Gln  Lys Leu Val
    1130                1135                 1140

Gln Glu His Glu Glu Lys Lys  Met Glu Leu Leu Asn  Met Tyr Ala
    1145                1150                 1155

Asp Lys Lys Gln Lys Leu Glu  Thr Ser Lys Ser Val  Glu Ala Ala
    1160                1165                 1170

Val Ile Arg Ile Thr Cys Ser  Arg Thr Ser Thr Gln  Val Gly Asp
    1175                1180                 1185

Leu Lys Leu Leu Asp His Asn  Tyr Glu Arg Lys Phe  Asp Glu Ile
    1190                1195                 1200

Lys Ser Glu Lys Asn Glu Cys  Leu Lys Ser Leu Glu  Gln Met His
    1205                1210                 1215

Glu Val Ala Lys Lys Lys Leu  Ala Glu Asp Glu Ala  Cys Trp Ile
    1220                1225                 1230

Asn Arg Ile Lys Ser Trp Ala  Ala Lys Leu Lys Val  Cys Val Pro
    1235                1240                 1245

Ile Gln Ser Gly Asn Asn Lys  His Phe Ser Gly Ser  Ser Asn Ile
    1250                1255                 1260

Ser Gln Asn Ala Pro Asp Val  Gln Ile Cys Asn Asn  Ala Asn Val
    1265                1270                 1275

Glu Ala Thr Tyr Ala Asp Thr  Asn Cys Met Ala Ser  Lys Val Asn
    1280                1285                 1290

Gln Val Pro Glu Ala Glu Asn  Thr Leu Gly Thr Met  Ser Gly Gly
    1295                1300                 1305

Ser Thr Gln Gln Val His Glu  Met Val Asp Val Arg  Asn Asp Glu
    1310                1315                 1320

Thr Met Asp Val Ser Ala Leu  Ser Arg Glu Gln Leu  Thr Lys Ser
    1325                1330                 1335

Gln Ser Asn Glu His Ala Ser  Ile Thr Val Pro Glu  Ile Leu Ile
    1340                1345                 1350

Pro Ala Asp Cys Gln Glu Glu  Phe Ala Ala Leu Asn  Val His Leu
    1355                1360                 1365

Ser Glu Asp Gln Asn Cys Asp  Arg Ile Thr Ser Ala  Ala Ser Asp
    1370                1375                 1380

Glu Asp Val Ser Ser Arg Val  Pro Glu Val Ser Gln  Ser Leu Glu
    1385                1390                 1395

Asn Leu Ser Ala Ser Pro Glu  Phe Ser Leu Asn Arg  Glu Glu Ala
    1400                1405                 1410

Leu Val Thr Thr Glu Asn Arg  Arg Thr Ser His Val  Gly Phe Asp
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                1415                    1420                    1425

Thr Asp  Asn Ile Leu Asp Gln  Gln Asn Arg Glu Asp  Cys Ser Leu
    1430                    1435                    1440

Asp Gln  Glu Ile Pro Asp Glu  Leu Ala Met Pro Val  Gln His Leu
    1445                    1450                    1455

Ala Ser  Val Val Glu Thr Arg  Gly Ala Ala Glu Ser  Asp Gln Tyr
    1460                    1465                    1470

Gly Gln  Asp Ile Cys Pro Met  Pro Ser Ser Leu Ala  Gly Lys Gln
    1475                    1480                    1485

Pro Asp  Pro Ala Ala Asn Thr  Glu Ser Glu Asn Leu  Glu Glu Ala
    1490                    1495                    1500

Ile Glu  Pro Gln Ser Ala Gly  Ser Glu Thr Val Glu  Thr Thr Asp
    1505                    1510                    1515

Phe Ala  Ala Ser His Gln Gly  Asp Gln Val Thr Cys  Pro Leu Leu
    1520                    1525                    1530

Ser Ser  Pro Thr Gly Asn Gln  Pro Ala Pro Glu Ala  Asn Ile Glu
    1535                    1540                    1545

Gly Gln  Asn Ile Asn Thr Ser  Ala Glu Pro His Val  Ala Gly Pro
    1550                    1555                    1560

Asp Ala  Val Glu Ser Gly Asp  Tyr Ala Val Ile Asp  Gln Glu Thr
    1565                    1570                    1575

Met Gly  Ala Gln Asp Ala Cys  Ser Leu Pro Ser Gly  Ser Val Gly
    1580                    1585                    1590

Thr Gln  Ser Asp Leu Gly Ala  Asn Ile Glu Gly Gln  Asn Val Thr
    1595                    1600                    1605

Thr Val  Ala Gln Leu Pro Thr  Asp Gly Ser Asp Ala  Val Val Thr
    1610                    1615                    1620

Gly Gly  Ser Pro Val Ser Asp  Gln Cys Ala Gln Asp  Ala Ser Pro
    1625                    1630                    1635

Met Pro  Leu Ser Ser Pro Gly  Asn His Pro Asp Thr  Ala Val Asn
    1640                    1645                    1650

Ile Glu  Gly Leu Asp Asn Thr  Ser Val Ala Glu Pro  His Ile Ser
    1655                    1660                    1665

Gly Ser  Asp Ala Cys Glu Met  Glu Ile Ser Glu Pro  Gly Pro Gln
    1670                    1675                    1680

Val Glu  Arg Ser Thr Phe Ala  Asn Leu Phe His Glu  Gly Gly Val
    1685                    1690                    1695

Glu His  Ser Ala Gly Val Thr  Ala Leu Val Pro Ser  Leu Leu Asn
    1700                    1705                    1710

Asn Gly  Thr Glu Gln Ile Ala  Val Gln Pro Val Pro  Gln Ile Pro
    1715                    1720                    1725

Phe Pro  Val Phe Asn Asp Pro  Phe Leu His Glu Leu  Glu Lys Leu
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            1730                    1735                    1740
Arg  Arg  Glu  Ser  Glu  Asn  Ser   Lys  Lys  Thr  Phe  Glu  Glu  Lys  Lys
     1745                    1750                    1755

Ser  Ile  Leu  Lys  Ala  Glu  Leu   Glu  Arg  Lys  Met  Ala  Glu  Val  Gln
     1760                    1765                    1770

Ala  Glu  Phe  Arg  Arg  Lys  Phe   His  Glu  Val  Glu  Ala  Glu  His  Asn
     1775                    1780                    1785

Thr  Arg  Thr  Thr  Lys  Ile  Glu   Lys  Asp  Lys  Asn  Leu  Val  Ile  Met
     1790                    1795                    1800

Asn  Lys  Leu  Leu  Ala  Asn  Ala   Phe  Leu  Ser  Lys  Cys  Thr  Asp  Lys
     1805                    1810                    1815

Lys  Val  Ser  Pro  Ser  Gly  Ala   Pro  Arg  Gly  Lys  Ile  Gln  Gln  Leu
     1820                    1825                    1830

Ala  Gln  Arg  Ala  Ala  Gln  Val   Ser  Ala  Leu  Arg  Asn  Tyr  Ile  Ala
     1835                    1840                    1845

Pro  Gln  Gln  Leu  Gln  Ala  Ser   Ser  Phe  Pro  Ala  Pro  Ala  Leu  Val
     1850                    1855                    1860

Ser  Ala  Pro  Leu  Gln  Leu  Gln   Gln  Ser  Ser  Phe  Pro  Ala  Pro  Gly
     1865                    1870                    1875

Pro  Ala  Pro  Leu  Gln  Pro  Gln   Ala  Ser  Ser  Phe  Pro  Ser  Ser  Val
     1880                    1885                    1890

Ser  Arg  Pro  Ser  Ala  Leu  Leu   Leu  Asn  Phe  Ala  Val  Cys  Pro  Met
     1895                    1900                    1905

Pro  Gln  Pro  Arg  Gln  Pro  Leu   Ile  Ser  Asn  Ile  Ala  Pro  Thr  Pro
     1910                    1915                    1920

Ser  Val  Thr  Pro  Ala  Thr  Asn   Pro  Gly  Leu  Arg  Ser  Pro  Ala  Pro
     1925                    1930                    1935

His  Leu  Asn  Ser  Tyr  Arg  Pro   Ser  Ser  Ser  Thr  Pro  Val  Ala  Thr
     1940                    1945                    1950

Ala  Thr  Pro  Thr  Ser  Ser  Val   Pro  Pro  Gln  Ala  Leu  Thr  Tyr  Ser
     1955                    1960                    1965

Ala  Val  Ser  Ile  Gln  Gln  Gln   Gln  Glu  Gln  Gln  Pro  Gln  Gln  Ser
     1970                    1975                    1980

Leu  Ser  Ser  Gly  Leu  Gln  Ser   Asn  Asn  Glu  Val  Val  Cys  Leu  Ser
     1985                    1990                    1995

Asp  Asp  Glu
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      Oligonucleotide

<400> 4
catctacggc aatgtaccag c                                      21


<210> 5
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      Oligonucleotide

<400> 5
gatgggaatt ggctgagtgg c                                      21


<210> 6
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
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      Oligonucleotide

<400> 6
cagttccaaa cgtaaaacgg c                                      21


<210> 7
<211> 15
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
         n= a, t, g, or c; w= a or t

<400> 7
ntcgastwts gwgtt                                             15


<210> 8
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
         n= a, t, g, or c; w= a or t

<400> 8
ngtcgaswga nawgaa                                            16


<210> 9
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<211> 16
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<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
      n= a, t, g, or c; w= a or t

<400> 9
wgtgnagwan canaga   16

<210> 10
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
      n= a, t, g, or c; w= a or t

<400> 10
wggwancwga wangca   16

<210> 11
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
      n= a, t, g, or c; w= a or t

<400> 11
wcgwwgawca ngncga   16

<210> 12
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide
      n= a, t, g, or c; w= a or t

<400> 12
wgcnagtnag wanaag   16

<210> 13
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide

n= a, t, g, or c; w= a or t

<400> 13
awgcangncw ganata   16

<210> 14
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide

<400> 14
ctgtacatac tgagtacaat cgga   24

<210> 15
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide

<400> 15
gcttcaattc ctgcctcagt tgaac   25

<210> 16
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide

<400> 16
ctctacgtgc ttaacatcat gcga   24

<210> 17
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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      Oligonucleotide

<400> 17
ccagcttctg ctactagaaa gtcag   25

<210> 18
<211> 25
<212> DNA
<213> Artificial Sequence

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<220>
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      Oligonucleotide

<400> 18
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<210> 19
<211> 25
<212> DNA
<213> Artificial Sequence

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      Oligonucleotide

<400> 19
gctctttgta agctgttcac gagac                                  25


<210> 20
<211> 24
<212> DNA
<213> Artificial Sequence

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      Oligonucleotide

<400> 20
tcgcatgatg ttaagcacgt agag                                   24


<210> 21
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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      Oligonucleotide

<400> 21
gagtactggt ccgtgaacag gtaat                                  25


<210> 22
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
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<400> 22
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<210> 23
<211> 25
<212> DNA
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<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
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<400> 23
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<210> 24
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence:Synthetic
      Oligonucleotide

<400> 24
cacaagcatg agtttttcct tccgg   25

<210> 25
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
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      Oligonucleotide

<400> 25
ctgactttct agtagcagaa gctgg   25

<210> 26
<211> 519
<212> DNA
<213> Brassica oleracea

<220>
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<400> 26
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tccactccca tggaagtgtt ccagcttatc aaataaatat gatgcccccc acatgagcaa 120
tgcatgtgtg agaggacggt ttaggttctc tagaggctta ttttgcctag caagaatcag 180
ggttttttct tcaactgtaa acactgagta caaccggaaa atcttagttc tttcagaaca 240
cgactcaacc tttatcttct ctaagagctt aacgtcatgc gatggattca ggctgcttcc 300
aaaaagtata aaagactcag cgcgtaagag tttaatgctt tgactacagg cacgtatttc 360
cagcagcaga ataaaacact cactctcctt gttgaaattg tttatagcgt tcttcttcga 420
gaggcagacc ccatgctcat aggaattttg accaaatctt tgcatcagaa aatcttcgag 480
aatattacca agcagaagcc cctcagggct atgtattgc   519

<210> 27
<211> 419
<212> DNA
<213> Brassica oleracea

<220>

<223> seq1-27

<400> 27
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tcctgtggaa gtaactaagg atatagagaa gacagtggtt gattcatccc ccatggttga 120
aactgaggat ggcagtgtta taggttcacc atccgagaat ccagaaccac aaaagcttcg 180
tgacagtgaa actagcttgg aaaccgatat agacttggct ctgaaaagaa aaagagacac 240
tgcagaaatt gtgatggatg catgtacaaa tgcagatgac cgcattatga gtactgatgg 300
ggttattcct tttccacccg tgtgcacaaa tattaatcaa cccgaaaggt gtggcacatg 360
tcaaaaacgg caaaagtaag aatttccgac tgttgtctgt cgttttgaaa ccatttgcc 419
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<210> 28
<211> 467
<212> DNA
<213> Brassica oleracea

<220>
<223> seq1-43

<400> 28
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cttttggaag ccaagcatgc tcagggaagt tacagcactg atgctactct atttggtgaa 120
gaacatgtca agttatcaga tgaaagtcca aatatgtttt ggtcaaagct gttgagtgga 180
aagaacccta tgtggaaata ctgttcggat actcctcaaa ggagtcgaaa aagagtacgg 240
catcttcagg gctatgagga gactaccaaa gttggcaatg gcggaaactt aaagaagaaa 300
aagaaggctt cagatgatgt cacagtagat aacgctgaga gaaaagcctc tggaaaggat 360
cacatgggta aaacagttca cttcctgctc ctttacctct agtgttcatt gaatgttcca 420
tttactttgc ttactatctt tccttcaggg catttggagt caccaaa 467
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<210> 29
<211> 490
<212> DNA
<213> Brassica oleracea

<220>
<223> seq1-47

<400> 29
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gataaaacga accaaaactg gaggtaacag atactctgag aacaactaac cttttcttca 120
taagtcttct ttgtgttctc tgattctctc cgcagcttct ccagttcatg ctgaaatggg 180
tcactgaaca cagggaaagg tacttgagga acaggtggag tggcattctg tcccgtagca 240
ttgttaagct gtgaagaaac aggagctgtt acacctgctg gaggctccac aacaccttca 300
tcgacaacgt ctgcgtaaaa ggtattacca gattgtcagt ttctctggca aacacatacg 360
ttatacttaa atgcaaaaga gcagttactg acttgcaaag gttggttgtt ctacttgagc 420
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tgttgtgttg 490
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<210> 30
<211> 515
<212> DNA
<213> Brassica oleracea

<220>
<223> 2-33

<400> 30
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gggcgcacac aaggtttcca agaaaagggt gaagaatgca tggctgagaa aagaggtagc 120
cattatagct cagtaaccaa ggatgttgaa aagactatta gcgacatcaa aaagaaatgc 180
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agtaagagcc tgcataagct tgtacaaacc ctcgaggaag aaaagatgga cctgatgaat 240
aggaatgctg tcaagaagca ggaacttcag aattgtaaaa aggtggaagc atcatttatt 300
cgtgtcacct attcaggtat aaatactcag agcttacatg atgctctcca acggctggaa 360
tgtactttg aaagaaagtt tgatgatctc aaaggagagt tggatgaatg ccttgaaagt 420
ttagagcaaa taaacgaggc tggaaagaag aagttggctg aagatgaagc ctgttggatt 480
agtcggatag agaaatgggc acgagctgaa ttaag                           515
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<211> 574
<212> DNA
<213> Brassica oleracea

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<223> seq2-37

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tgaataaacg catttgaata tggtaaaggg ttggagatga gaggttgtct tggttgaggc 180
attgtgcagt acggagccga agcagtatga ttcctcagtg cgcttacttg tgttgctctc 240
tgtgctagct gctggattct aactggagaa agaaaaaaag aaaaaaaagg tgttattatg 300
acttcataac cttatatctt taaaaaacaa ttatgcttct attattcgaa cacttgccca 360
ttggagttgc tgctgaggaa tgagaggaga ttctgctcgt acatttagac aagaacgcac 420
tcgacaacag cttgttcttt ataacaagat tcttcctcgt ctgtaacttc gtctttctgg 480
ctgcatgtac agcttgtacc tcatgaaact ttctctgata ctcttcttgt aattcagcta 540
tcttcttctc gaatttagct ttcaagactg cttt                           574
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<210> 32
<211> 466
<212> DNA
<213> Brassica oleracea

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tctccgtgtt tcctccagca ttgctcagcc agttcaagaa cctgatcact tggcacaggt 120
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